PATENT APPLICATION NO.: 10/743,476
Docket No.: 678-1264(P11404)

AMENDMENTS TO THE SPECIFICATION

Amend the paragraphs starting at line 26 on page 26 and continuing to page 27; line 8 of submitted with the Preliminary Amendment dated January 20, 2005, as follows.

Figure 9B shows an exemplary action selection method according to a graph search strategy. Again, in stage 1 the process begins by determining the state of the world (virtual environment), including the state of the intelligent agent and of the objects in the world. In stage ~~2~~11, the intelligent agent is queried. In stage 1~~2~~3, the intelligent agent obtains a set of legal (permitted or possible) actions for each world object; preferably each world object is queried as shown.

The method now branches into two parts. A first part, shown on the right, is performed for each action path. In stage 4~~13~~, an action to be performed is simulated. In stage ~~5~~14, the effect of the simulation is determined for the world, and is preferably determined for each world object in stage 6~~15~~. In stage ~~7~~16, a grade is determined for the effect of each action.

In stage ~~8~~17, the state of the objects and hence of the world is determined, as is the overall accumulated reward of an action. In stage 9~~18~~, the effect of the action is simulated on the intelligent agent; preferably the effect between the intelligent agent and each world object is also considered in stage ~~10~~19.

Turning now to the left branch of the method, in stage ~~11~~20, all of this information is preferably used to determine the action path with the highest reward. In stage ~~12~~21, the action is generated. In stage 1~~3~~22, the action priority is set, preferably according to the action grade or reward. In stage 23~~14~~, the action is placed in a queue at the action manager, as for Figure 9A. In stage 24~~15~~, the action is considered by the action manager according to priority; the highest priority action is selected, and is preferably executed in stage ~~16~~25.